# GOVERNMENT OF INDIA
# WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION
# LOK SABHA

UNSTARRED QUESTION NO:752
ANSWERED ON:20.07.2017
Socio-environmental concerns of Inter-linking of Rivers
Natterjee Shri J. Jayasingh Thiyagaraj

**Will the Minister of WATER RESOURCES, RIVER DEVELOPMENT AND GANAGA REJUVENATION be pleased to state:**

(a) whether the Government has considered any socio-environmental concerns related to inter-linking of rivers project, if so, the details thereof;
(b) whether a very detailed hydrological, geological, meteorological and environmental analysis of the project has been completed or is under progress, if so, the details thereof;
(c) the details of the river links and storage structures likely to be covered / considered to transfer surplus of water through a canal network after completion of the said project; and
(d) the detailed list of the proposed links, State-wise?

## Answer

THE MINISTER OF STATE FOR WATER RESOURCES, RIVER DEVELOPMENT AND GANGA REJUVENATION
(DR. SANJEEV KUMAR BALYAN)

(a) At the time of preparation of Detailed Project Report (DPR) of the individual river link projects, detailed Environmental Impact Assessment (EIA) studies and Socio-economic studies as per Terms of Reference approved by Environmental Appraisal Committee (EAC) of Ministry of Environment and Forests & Climate Change (MoEF&CC) are carried out. EIA study includes impacts on land environment, water resources and its quality, terrestrial ecology (flora, fauna, vegetation cover, wildlife), aquatic ecology (riverine ecology, fisheries), pollution due to noise during construction phase, impact on air quality, impact due to command area development, impacts on local services ( like water supply, education, health care, community forests, impacts on business opportunities). All environmental impacts and issues arising out of the EIA studies are duly addressed in Environmental Management Plan which forms a part of DPR. The Socio-economic studies include detailed Resettlement & Rehabilitation (R&R) Plan for project affected persons including Tribal population.

(b) At the time of preparation of DPR for link projects, detailed hydrological, geological, meteorological and environmental analysis of the projects are carried out. So far, DPR of Ken-Betwa link project, Damanganga-Pinjal link project and Par-Tapi-Narmada link project have been completed for which comprehensive socio-economic, environmental impact assessment studies were carried out as per the terms of reference of MoEF&CC.

(c) & (d) Under the National Perspective Plan (NPP) for water resources development through inter basin transfer of water prepared by this Ministry, National Water Development Agency (NWDA) has identified 30 links (16 under Peninsular Component & 14 under Himalayan Component) for preparation of Feasibility Reports (FRs). After survey and investigations, FRs of 14 links under Peninsular Component and 2 links in the Himalayan component have been prepared. Present status, States concerned and States benefited of Inter Basin Water Transfer Links are given in Annexure-I. The detailed list of storage structures likely to be covered/considered for transfer of surplus of water through canal/tunnel network are given in Annexure-II.

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ANNEXURE-I
Annexure referred to in reply to part (c) & (d) of Unstarred Question No. 752 to be answered in Lok Sabha on 20.07.2017 regarding "Socio-environmental concerns of Inter-linking of Rivers".
Present status of Inter Basin Water Transfer Links, the States involved, name of rivers and status of Feasibility Reports/Detailed Project Report

Sl. No Name Rivers States concerned Status
Peninsular Component
1 Mahanadi (Manibhadra) - Godavari (Dowlaiswaram) link Mahanadi & Godavari Odisha, Maharashtra, Andhra Pradesh, Karnataka, & Chattisgarh FR Completed
2 Godavari (Inchampalli) - Krishna (Pulichintala) link Godavari & Krishna -do- FR Completed
3 Godavari (Inchampalli) - Krishna (Nagarjunasagar) link Godavari & Krishna Odisha, Maharashtra, Madhya Pradesh, Andhra Pradesh, Karnataka & Chattisgarh, FR Completed
4 Godavari (Polavaram) - Krishna (Vijayawada) link Godavari & Krishna Odisha, Maharashtra, Andhra Pradesh, Karnataka, & Chattisgarh FR Completed
5 Krishna (Almatti) − Pennar link Krishna & Pennar -do- FR Completed
6 Krishna (Srisailam) − Pennar link Krishna & Pennar -do- FR Completed
7 Krishna (Nagarjunasagar) - Pennar (Somasila ) link Krishna & Pennar Maharashtra, Andhra Pradesh & Karnataka, FR Completed

8 Pennar (Somasila) - Cauvery (Grand Anicut) link Pennar & Cauvery Andhra Pradesh, Karnataka, Tamil Nadu, Kerala & Puducherry FR Completed
9 Cauvery (Kattalai) - Vaigai -Gundar link Cauvery, Vaigai & Gundar Karnataka, Tamil Nadu, Kerala & Puducherry FR Completed
10 Ken-Betwa link
Ken & Betwa Uttar Pradesh & Madhya Pradesh FR & DPR (Ph-I&II) Completed
11 Parbati -Kalisindh- Chambal link Parbati, Kalisindh & Chambal Madhya Pradesh, Rajasthan & Uttar Pradesh (UP requested to be consulted during consensus building) FR Completed
12 Par-Tapi-Narmada link Par, Tapi & Narmada Maharashtra & Gujarat FR & DPR Completed
13 Damanganga - Pinjal link Damanganga & Pinjal Maharashtra & Gujarat FR & DPR Completed.
14 Bedti - Varda link Bedti & Varda Maharashtra, Andhra Pradesh & Karnataka PFR Completed
15 Netravati − Hemavati link Netravati & Hemavati
Karnataka, Tamil Nadu & Kerala PFR Completed
16 Pamba - Achankovil - Vaippar link Pamba, Achankovil & Vaippar
Kerala & Tamil Nadu, FR Completed
Himalayan Component

1. Manas-Sankosh-Tista-Ganga (M-S-T-G) link Manas-Sankosh-Tista-Ganga Assam, West Bengal, Bihar& Bhutan PFR completed
2. Kosi-Ghaghra link Kosi & Ghaghra Bihar , Uttar Pradesh & Nepal PFR completed
3. Gandak-Ganga link Gandak & Ganga -do- Draft FR completed
(Indian portion)
4. Ghaghra-Yamuna link Ghaghra & Yamuna -do- FR completed (Indian portion)
5. Sarda-Yamuna link Sarda & Yamuna Bihar, Uttar Pradesh, Haryana, Rajasthan, Uttarakhand & Nepal FR completed (Indian portion)
6. Yamuna-Rajasthan link Yamuna & Sukri Uttar Pradesh, Gujarat, Haryana & Rajasthan Draft FR completed
7. Rajasthan-Sabarmati link Sabarmati -do- Draft FR completed
8. Chunar-Sone Barrage link Ganga & Sone Bihar & Uttar Pradesh Draft FR completed
9. Sone Dam − Southern Tributaries of Ganga link Sone & Badua Bihar & Jharkhand PFR completed.
10. Ganga(Farakka)-Damodar-Subernarekha link Ganga, Damodar & Subernarekha West Bengal, Odisha & Jharkhand Draft FR completed
11. Subernarekha-Mahanadi link Subernarekha & Mahanadi West Bengal & Odisha Draft FR
Completed
12.
Kosi-Mechi link Kosi &Mechi Bihar , West Bengal & Nepal PFR completed Entirely lies in Nepal
13. Ganga (Farakka)-Sunderbans link Ganga & Ichhamati West Bengal Draft FR completed
14. Jogighopa-Tista-Farakka link (Alternative to M-S-T-G) Manas, Tista & Ganga -do- (Alternative to M-S-T-G Link) dropped

â€¢ PFR- Pre Feasibility Report
â€¢ FR- Feasibility Report
â€¢ DPR- Detailed Project Report

ANNEXURE-II

Annexure referred to in reply to part (c) & (d) of Unstarred Question No. 752 to be answered in Lok Sabha on 20.07.2017 regarding "Socio-environmental concerns of Inter-linking of Rivers".
LIST OF DAMS PROPOSED/EXISTING IN INTER BASIN WATER TRANSFER PROPOSALS
Sl.No. Name of the Link Name of the Dam Location of dam
I HIMALAYAN COMPONENT
1 Kosi-Mechi 1.Kosi Nepal
2 Kosi-Ghagra - -
3 Gandak-Ganga 1.Gandak Nepal
2. Seti -do-
3.Marshyandi -do-
4.Kali Gandaki -do-
5.Burhi Gandaki -do-
4 Ghagra-Yamuna 1.Chisapani -do-
5 Sarda-Yamuna 1.Poornagiri -do-
6 Yamuna-Rajasthan - -
7 Rajasthan-Sabarmati - -
8 Chunar-Sone Barrage - -
9 Sone Dam-Southern Tributaries of Ganga 1.Kadwan Bihar
10 Brahmaputra-Ganga (Manas-Sankosh-Tista-Ganga) 1.Manas
2. Sankosh Bhutan
-do-
11 Brahmaputra-Ganga (Jogighopa-Tista-Farakka) - -

12 Farakka-Sunderbans - -
13 Ganga(Farakka)-Damodar-Subernarekha - -
14 Subernarekha-Mahanadi - -
Sub Total(I): 11
II PENINSULAR COMPONENT
1 Mahanadi(Manibhadra)-Godavari(Dowlaiswaram) 1.Manibhadra Orissa

2 Godavari(Polavaram)-Krishna(vijayawada) 1.Polavaram Andhra Pradesh
3 Godavari(Inchampalli)-Krishna(Nagarjunasagar) 1.Inchampalli -do-
4 Godavari(Inchampalli)-Krishna(Pulichintala) 1.Pulichintala -do-
5 Krishna(Nagarjunasagar)-Pennar(Somasila) 1.Nagarjunasagar* -do-
6 Krishna(Srisailam)-Pennar 1.Srisailam* -do-
7 Krishna(Almatti)-Pennar 1.Almatti* Karnataka
8 Pennar(Somasila)-Cauvery(Grand Anicut) 1.Somasila* Andhra Pradesh
9 Cauvery(Kattalai)-Vaigai-Gundar - -
10 Parbati-Kalisindh-Chambal 1.Patanpur
2.Mohanpura
3.Kundaliya Madhya Pradesh
-do-
-do-
11 Damanganga-Pinjal 1.Bhugad Gujarat
2.Khargihill Maharashtra
3. Pinjal -do-
12 Par-Tapi-Narmada 1.Jheri Maharashtra
2.Mohankavchali Gujarat
3.Paikhed -do-
4.Chasmandva -do-
5.Chikkar -do-
6.Dabdar -do-
7.Kelwan -do-
13 Ken-Betwa 1.Daudhan Madhya Pradesh
14 Pamba-Achankovil-Vaippar 1.Punnamedu Kerala
2.Achankovil Kalar -do-
3.Achankovil -do-
15 Bedti-Varda 1.Pattanadahalla Karnataka
2.Shalmalahalla -do-
16 Netravati-Hemavati 1.Yattin hole -do-
2.Keri hole -do-
3.Hongadhallad -do-
Sub Total(II): 30
Grand Total(I+II): 41

* Existing Dams